Issues for Future Systems Costing

Panel – 17
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Two Costing Issues

- Determine how much and who pays for shared data and services in future net-centric programs

- Determine cost implications of including training plans early in the JCIDS and Acquisition processes

Considerations

- Streamlining Acquisition
  - **Lean 6 Sigma**
  - **Concept Decision Pilot Programs**
  - **Other**
- Costing of shared infrastructure
- Include detailed Training Plans and details up-front in Concept Decision and as Program KPPs

Streamlining Acquisition

- **Some problems with acquisition?**
  - **Slow**
  - **Significant labor requirements to satisfy the "process"**
    - **Services report they are spending too much time and money producing acquisition documents which no one reads**
  - **Capabilities frequently reach concept decision and enter into Milestone A or A/B without sufficient "concept refinement"**
  - **Senior managers request need for analysis driving decisions for program start up or go – no go earlier in concept process**
- **Recent Improvement Initiatives**
  - **Lean 6 Sigma working group looked at documents and timing of process - outcome?**
  - **Four Concept Decision Pilot Programs were formed to expedite critical programs**
  - **Use Technology Readiness Levels to reign in "over optimism"**

GIG Background

Global Information Grid (GIG) – "is a globally interconnected, end to end set of information capabilities, associated processing, and personnel for collecting, processing, storing, disseminating, and managing information on demand"

- **Net-Centric Enterprise Services (NCES)**
  - **Service-Oriented Architecture Foundation (SOAF)**
  - **Collaboration**
  - **Discovery & Delivery**
  - **Portal**
- **Net-Enabled Command Capability**
  - **Net-Centric data strategy (2003)**
  - **C2 in a net-centric environment (2005)**
  - **Provide data and information needed for timely, informed decisions**

Allocating Shared Costs

- DoD has no established process (or understanding of need?) for sponsoring enterprise-level efforts
  - DISA GIG programs example
  - Training Transformation (T2) business model gets at the issue to incentivize Services and Agencies to collaborate on common capabilities
  - Joint Simulation System
- Net-centric environments of the future will require more sharing of infrastructure, data and models

- Related issues
  - Systems interoperability
  - Joint Program Management across programs
  - Up-front systems engineering
  - Redundant costs across enterprise
  - Additional incremental costs for reuse

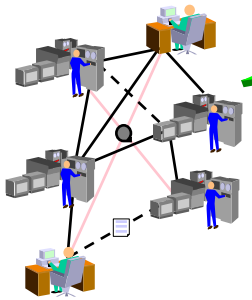
Training Implications

- **Focus on training during concept development**
  - **Training Plans fleshed out in concept definition**
  - **Training objectives drive use of simulators, simulations and on-line training tools as part of systems design**
  - **Ensure learning and performance factors are considered**
- **Determine training needs over program life**
  - **Establish training as a Key Performance Parameter**
  - **Include training simulators or training systems for operators/crews prior to introduction of hardware system**
  - **Include development and operational testing with engineering approach to training**
- **Related issues**
  - **Safety**
  - **Joint Program Management**
  - **Up-front systems engineering**
  - **Provide continuous training environment**

Questions?

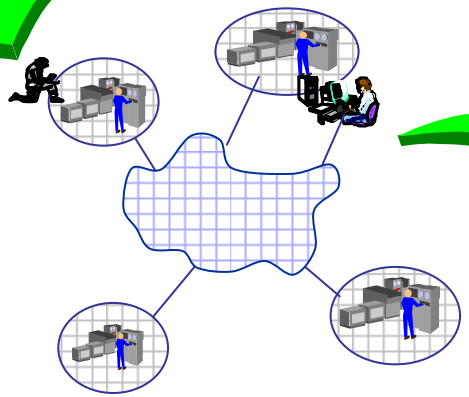
Road to Net-Centric Operations

Pre-Web. . .



- *Stovepipe systems*
- *Little or no interoperability*
- *Some network connections*

. . .Today. . .



- *More networks*
- *Some web services*
- *Various directory & security services*
- *Uncoordinated Service/Functional IT transformations*
- *Few authoritative data sources*
- *Network-Centric, but not Net-Centric*

. . . Joint / Enterprise

The GIG

- ***Pervasive networks***
- ***Accurate, timely & relevant info to the edge***
- ***…it's all about the data…***
- ***Services Oriented***
- ***Dynamically composable architectures***
- ***Mission-effective applications***
- ***Assured, interoperable enterprise services***